

CLAIMS

We claim:

Sub A³⁷

1. A method in a computer system for transferring a compressed data file from a software application running within the computer system to a device in communication with the computer system, said method comprising:

5 receiving a request to transfer a compressed data file to the device from the software application;

determining whether the device is configured to decompress the compressed data file;

10 if the device is configured to decompress the compressed data file, obtaining the compressed data file from the software application; and transferring the data file to the device via a device driver interface.

2. The method as recited in claim 1, wherein the step of receiving a request to transfer a compressed data file includes receiving a data structure from the software application, the data structure containing an indication of a classification of the compressed data file format and a pointer to the compressed data file.

3. The method as recited in claim 1, wherein said determination of the device configuration further comprises:

sub A³7

obtaining a device file decompression configuration data structure,
the data structure containing data indicative of compressed data file
formats supported by the device; and

determining whether the file decompression configuration data
structure indicates whether the device is configured to decompress the
compressed data file.

4. The method as recited in claim 3, wherein said determining step
includes:

passing a compressed data file pointer to the device; and

receiving an indication whether the device is configured to
decompress the compressed data file.

5. The method as recited in claim 1, wherein said transferring step
includes performing coordinate transformations to the data file.

6. The method as recited in claim 1, wherein said transferring step
includes performing file processing to the data file.

7. The method as recited in claim 1, wherein the compressed data file
is a compressed data image.

Sub A³ 7

8. The method as recited in claim 7, wherein the compressed data image file is a JPEG image.

9. The method as recited in claim 7, wherein the compressed data image file is a PNG image.

10. The method as recited in claim 1 further comprising the step of receiving an uncompressed data file from the software application if the device is not configured to receive the compressed data file.

11. A computer readable medium having computer-readable instructions for performing the steps recited in claim 1.

12. A computer system having a memory, an operating system and a central processor being operable to execute the steps recited in claim 1.

13. A computer-readable medium having computer-executable components comprising:

(a) a device support query component for determining whether a device is configured to decompress a compressed data file associated with an application;

(b) an application interface component for receiving the compressed data file from the application; and

Sub A³7

(c) a device interface component for transferring the compressed data file to the device.

14. The computer-readable medium of claim 12, wherein said application interface component includes a compressed data file information transformation component for manipulating data within the compressed data file.

15. A method in a computer system for transferring a compressed data image file from a software application running within the computer system to a device in communication with the computer system, said method comprising:

5 receiving a file query from the software application, the file query containing a pointer to a compressed data image file and a designation of a type of compressed data image file;

10 comparing the designation of compressed data image file with a data structure containing data indicative of types of compressed data image files supported by the device;

if the device supports the compressed data image file format, passing a pointer to the compressed data image file and the designation of a type of compressed data image file to query for to the device;

15 if the device is configured to decompress the compressed data file, returning an answer;

obtaining a data structure having data indicative of the compressed data image file from the software application; and

Sub A³ 7

upon obtaining the data structure, transferring the data image file to the device via a device driver interface.

16. The method as recited in claim 15, wherein said transferring step includes performing coordinate transformations to the data image file.

17. The method as recited in claim 15, wherein said transferring step includes performing image processing to the data image file.

18. The method as recited in claim 15, wherein said transferring step includes passing the transferred compressed image file in a data structure.

19. The method as recited in claim 15, wherein the compressed data image file is a JPEG compressed data image file.

20. The method as recited in claim 15, wherein the compressed data image file is a PNG compressed data image file.

21. The method as recited in claim 15, further comprising the step of returning a negative answer and receiving an uncompressed data image file from the software application if the device is not configured to receive the compressed data image file.

Sub A³7

22. A computer readable medium having computer-readable instructions for performing the steps recited in claim 15.

23. A computer system having a memory, an operating system and a central processor being operable to execute the steps recited in claim 15.

24. The method as recited in claim 15, wherein the file query, the query response and the file transfer are facilitated by a graphics driver interface and a hardware device driver.

25. The method as recited in claim 24, wherein said hardware device is a printer and said device driver is a printer driver.

26. A method in a computer system for transferring a compressed data file from a software application running within the computer system to a device in communication with the computer system, said method comprising:

5 requesting a determination whether the device is configured to decompress the compressed data file;

 receiving a response whether the device is so configured; and

 if the device is configured to decompress the compressed data file, transferring the compressed data file to the computer system.

Sub A³ 7

27. The method as recited in claim 26, wherein said requesting step includes passing a pointer to the compressed data file and a indication of a type of compressed data file to the computer system.

28. The method as recited in claim 26, wherein said transferring step includes passing the compressed data file to the operating system via a data structure.

29. The method as recited in claim 26 further comprising the step of decompressing the compressed data file and transferring the uncompressed data file to the computer system if the device is not configured to decompress the compressed data file.

30. The method as recited in claim 26, wherein the compressed data file is a compressed data image file.

31. The method as recited in claim 30, wherein the compressed data image file is a JPEG compressed data image file.

32. The method as recited in claim 30, wherein the compressed data image file is a PNG compressed data image file.

33. A computer readable medium having computer-readable instructions for performing the steps recited in claim 26.

Sub A³ 7

39. The data structure recited in claim 35, wherein the second field includes an address to a compressed data file.

40. The data structure recited in claim 35, wherein the second field includes a copy of the compressed data file.

41. The data structure recited in claim 35, wherein the third field includes a numeral indicative of whether the device is configured to decompress the compressed data file.

42. The data structure recited in claim 35, wherein the compressed data file is a compressed data image file and the device is a printer.

43. The data structure recited in claim 42, wherein the compressed data image file is a JPEG compressed data image file.

44. The data structure recited in claim 42, wherein the compressed data image file is a PNG compressed data image file.

1

Add A⁴ 7